

WHAT IS CLAIMED IS:

1. Software for diagnosing a memory system including a plurality of memory system devices, the software embodied in computer readable media and when  
5 executed operable to:  
    select at least one memory system device for isolation;  
    facilitate isolation of the at least one selected memory system device; and  
10     perform at least one diagnostic test on the isolated device.
2. The software of Claim 1, further operable to repeat the select, facilitate and perform operations for  
15 each memory system device.
3. The software of Claim 1, further operable to log one or more results from the memory system device diagnostic test.  
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4. The software of Claim 1, further operable to maintain isolation of each memory system device whose diagnostic test indicates faulty operation.
- 25 5. The software of Claim 1, further operable to report each memory system device whose diagnostic test indicates faulty operation.

6. The software of Claim 1, further operable to,  
if a plurality of memory system devices are selected for  
isolation, repeat the select, facilitate and perform  
operations for each device within the isolated memory  
5 system device plurality.

7. The software of Claim 1, further operable to  
effect the select, facilitate and perform operations on  
at least one memory slot of the memory system.  
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8. The software of Claim 1, further operable to  
disable all system memory devices except the at least one  
selected memory system device.

15 9. The software of Claim 1, further operable to  
disable the at least one selected memory system device.

10. Software for managing a memory system having a plurality of memory system devices, the software embodied in computer readable media and when executed operable to:

5 receive an operating state selection for a selected memory system device; and

alter a current memory system device operating state in accordance with the operating state selection.

11. The software of Claim 10, further operable to  
10 communicate an operating state for each memory system device.

12. The software of Claim 10, further operable to  
15 maintain the selected operating state through subsequent information handling system boot operations.

13. The software of Claim 10, further operable to disable the selected memory system device.

20 14. The software of Claim 10, further operable to disable a memory card slot of the memory system, the memory card slot adapted to support a dual-channel memory card.

15. An information handling system, comprising:  
a plurality of memory slots operable in at least one  
of a plurality of operating states;  
at least one processor operably coupled to the  
5 memory slots; and  
a program of instructions executable by the  
processor, the program of instructions operable to effect  
a selected operating state for at least one of the  
plurality of memory slots.

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16. The information handling system of Claim 15,  
further comprising the program of instructions operable  
to:

display a memory slot representation corresponding  
15 to a respective one of the plurality of memory slots; and  
communicate an operating status for each displayed  
memory slot representation, the operating status  
corresponding to an operating state for each respective  
memory slot.

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17. The information handling system of Claim 15,  
further comprising:

a basic input/output system memory operably coupled  
to the processor;

25 a basic input/output system program stored in the  
basic input/output system memory; and

the program of instructions incorporated in the  
basic input/output system program.

18. The information handling system of Claim 15,  
further comprising the program of instructions operable  
to maintain the selected operating state of the memory  
devices through additional information handling system  
5 operations.

19. The information handling system of Claim 15,  
further comprising the program of instructions operable  
to initiate a diagnostic routine, the diagnostic routine  
10 operable to test at least one enabled memory slot.

20. The information handling system of Claim 15,  
further comprising the program of instructions operable  
to selectively toggle the operating state for each of the  
15 plurality of memory slots between enabled and disabled.

21. The information handling system of Claim 20,  
further comprising the program of instructions operable  
to prevent communication with a memory module disposed in  
20 a memory slot in the disabled operating state.

22. A method for identifying faulty devices in a memory system including a plurality of memory slots and a plurality of memory modules disposed in at least a portion of the plurality of memory slots and wherein the  
5 memory slots are controllable from a basic input-output system (BIOS) utility, comprising:

isolating, via a BIOS utility setting, a memory system device; and

performing at least one diagnostic test on the  
10 isolated memory system device, the diagnostic test operable to produce at least one result.

23. The method of Claim 22, further comprising:  
selecting a memory system device for isolation; and  
15 disabling any remaining memory system devices via the BIOS utility setting.

24. The method of Claim 23, further comprising repeating the selecting, disabling and performing  
20 operations for each memory system device.

25. The method of Claim 22, further comprising performing diagnostic testing on the memory module associated with the isolated memory system device.  
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26. The method of Claim 22, further comprising performing diagnostic testing on the memory slot associated with the isolated memory system device.

27. The method of Claim 22, further comprising reporting any memory system devices whose diagnostic test results indicate faulty operation.

5        28. The method of Claim 22, further comprising maintaining, via BIOS utility settings, disability of those memory system devices whose diagnostic test results indicate faulty operation.

10       29. The method of Claim 22, further comprising:  
      logging the results for the diagnostic test  
      performed on each isolated memory system device; and  
      reporting to a user those memory system devices  
      whose logged results indicate faulty operation upon  
15    completing diagnostic testing for a each populated memory  
      system memory.